WINTER 2007

MILK RIVER WATERSHED NEWS

Life Line of the Hi-Line

Larry Mires, Executive Director
St. Mary Rehabilitation Working Group
January 18, 2007

"There's a reason the Milk River is called the lifeline of the Hi-line - because water is more valuable than gold for the people, the land and the ecosystems of the Milk River basin. Rehabilitation of the St. Mary diversion system could mean life or death for many communities, farmers, ranchers, and recreational opportunities along the Hi-line…."

Comment by Senator Jon Tester on passage of Senate Joint Resolution 9 in 2005. SJ9 was part of a greater effort by Montana legislators to encourage the Federal government to allocate more financial support for rehabilitation of the St. Mary diversion facilities.

As I reflect on the last 4 years of the dedicated volunteer work by St. Mary Rehabilitation Working Group (SMRWG) members, it is incomprehensible that every Montanan is not 100 percent fully informed and supportive of the rehabilitation efforts. What I'm discovering is: 1.) Many people have heard of the project, but still aren't sure what it's all about, 2.) Some don't recall hearing about the situation, and 3.) Some unaffected individuals could care less. I have to remind myself that not everyone possesses my enthusiasm and passion for this project, but impassiveness is a trait of basic human nature when people do not understand how they are affected, which is difficult to overcome, and stresses the importance for continued education of what the SMRWG is all about.

St. Mary's Canal valve

The St. Mary Rehabilitation Working Group (SMRWG) was originally organized by Former Lt. Governor Ohs in November of 2003 to develop and implement a "workable solution" for rehabilitating the St. Mary Facilities before the system suffers a catastrophic failure. Lt Governor John Bohlinger picked up the ball without missing a step as an ardent supporter and co-chairman of the SMRWG effort. The sixteen-member Working Group includes representatives from irrigated agriculture, the Blackfeet and Ft. Belknap Tribes, municipal water supply, local economic development, and recreation. Along with Lt. Governor Bohlinger, Chinook irrigator, Randy Reed co-chairs the group with staff support provided by the Montana Dept of Natural Resources and Conservation. Simply put: The SMRWG is about a highly diverse group of stakeholders coming together to solve a common problem. We have come a long way in three years.

Some would argue that since our legislation wasn't able to get through the 109th Congress a solution in the near future looks rather dim. I believe that when one door shuts, another one opens, and we need to be prepared to take advantage of any opportunity that comes through it. Just as impassiveness is a basic trait of human nature, so too is perseverance. A major part of the solution to a project of this magnitude is perseverance! We can not quit until a "workable solution" is achieved. The support of the "Hi-Line Community" is the momentum-giving force behind the Working Group.

The Working Group meets monthly in one of the Hi-Line communities. At the end of each monthly meeting, time is set aside for public comment. All interested citizens are invited and encouraged to attend any and all of the SMRWG meetings.

For a meeting agenda and additional information, visit the Working Group website at www.dnrc.state.mt.us/stmarycover.htm or contact Larry Mires – Executive Director St. Mary Rehabilitation Working Group at Two Rivers Economic Growth Inc. 74 4th St N., Glasgow, MT 59230 (406) 263-8402 (cell) - email trg@nemontel.net or Paul Azevedo – State Coordinator at the DNRC Office in Helena, (406) 444-6635

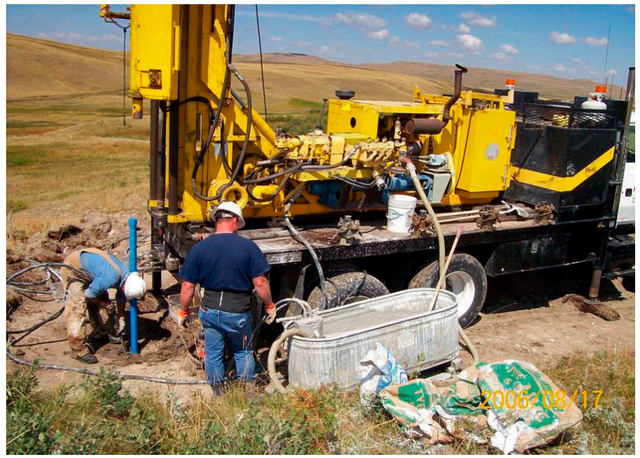
INSIDE

Status Report on the St. Mary Rehabilitation Project

Paul Azevedo
Project Coordinator, DNRC

During 2006, the St. Mary Rehabilitation Working Group and State of Montana made steady progress in developing the foundation of engineering and economic information upon which rehabilitation of the St. Mary Diversion and Conveyance Facilities will be built. Funding for these activities was provided by the 2005 Montana Legislature in the form of a Reclamation and Development Grant.

In 2006, the project's engineering firm, Thomas Dean & Hoskins (TD&H) began Phase 2 preliminary engineering design work for rehabilitating the St. Mary Diversion and Conveyance Works. The results of this effort are documented in the report *St. Mary Diversion Facilities Feasibility and Preliminary Engineering Report for Facility Rehabilitation* (TD&H, August, 2006). As part of Phase 2, TD&H examined several alternative designs for rehabilitating system infrastructure and developed feasibility level cost estimates for each. Based on currently available information, the estimated cost of rehabilitating the canal and associated infrastructure ranges from $130 - $140 million.



Drillers installing slope inclinometer tubes at Hall Coulee.

Phase 2 preliminary design work also included a preliminary economic analysis of the rehabilitation project. Preliminary analysis indicates that investment in the rehabilitation of the St. Mary Diversion Facilities will produce an estimated economic benefit of $24 to $39 million annually, compared to the amortized annual project cost of about $6.6 million. In other words, project benefits far exceed project costs by about a four to one ratio. These project benefits are shared over a number of sectors including irrigated agriculture, municipal and rural water uses, recreation, fish and wildlife, and ecosystem services including the provision of wetlands. The net present value of project benefits over the 100-year design life of a rehabilitated project is estimated to be between $410 and $660 million. This very significant impact relative to cost reflects the fact that substantial private sector infrastructure is already in place. Complete results can be found in the report *St. Mary Diversion & Milk River Project Preliminary Economic Analysis Impacts and Benefit-Cost Analysis* (Bioeconomics, August 30, 2006).

The installation of instrumentation to records slope movement added to our knowledge of slope instabilities at the location of the St. Mary and Hall Coulee siphons. Slope movement has been a continuous problem with the stability, integrity, and safety of the existing siphon crossings at both locations. By reading the recorders on a monthly basis, project engineers will be able to determine the speed of slope movement, seasonal changes in slope movement, and depth and thickness of the slide surface. An understanding of the dynamics of slope movement is critical to designing the new siphons that will be installed as part of the overall rehabilitation of the canal.

With the use of federal funds provided by Senator Max Baucus and State match funds provided by the 2005 Montana Legislator, the MT Dept of Transportation has started engineering design work on a new bridge over the St. Mary River. The current bridge was built in 1915 and no longer meets load and clearance standards. As a result, the bridge is insufficient to handle anticipated construction traffic and must be replaced before rehabilitation activities on the canal can begin. Geotechnical investigations at the site of the new bridge abutments have been completed and the engineering design work is approximately 30% complete. The Dept of Transportation is aiming to complete final design by July, 2008 and begin construction in 2009.

Other activities started in 2006 include a study undertaken by the Blackfeet Tribe on the economic feasibility of incorporating hydropower generation into a rehabilitated canal design. HKM Engineering out of Billings MT is conducting the study of behalf of the Tribe. A final report is due in April 2007. Federal funds provided by Senator Conrad Burns are being used by TD&H, in partnership with the Blackfeet Tribe, to complete a detailed topographic survey of the canal route. Collection of this information is critical to any future design work. In addition, federal funds are being used by the Blackfeet Tribe to identify and evaluate the cultural and historic resources that may be affected by the rehabilitation project.

From my view as State Coordinator of the St. Mary Rehabilitation Project, our biggest success of 2006 contained elements of the proverbial double-edge sword. In June 23, 2006 Senator Conrad Burns introduced Senate Bill 3563 the "St. Mary Diversion and Conveyance Works and Milk River Project Act of 2006" in the 109th Congress. S.3563 was the subject of field hearing before members of the Senate Energy and Natural Resources Committee in Havre on September 1. Unfortunately, the legislation died in committee when the 109th Congress adjourned. Regrettably, the demise of S.3563 has led to speculation that the Working Group's efforts may have been in vain. Nothing could be further from the truth!

By every stretch of the imagination, finding a workable solution to rehabilitate the St. Mary Divergence and Conveyance Facilities is a difficult and complex proposal. Members of the Working Group over came every obstacle and met every challenge presented in 2006. There is no reason to doubt ourselves or the importance of achieving the goal based on events in Washington D.C. that are far beyond our ability to direct or control.

A track rig is used for geotechnical drilling in the St. Mary River for the center pier of the new bridge near Babb, Montana

Montana's experience with developing regional drinking water projects shows teamwork, tenacity, and perseverance are the keystones to success. Planning for what has become the Ft. Peck – Dry Prairie Regional Water System started in 1994. The project received Congressional authorization in 2000 with ground breaking on the first phase of construction in 2003. Planning for the Rocky Boy – North Central Regional Water System started in the early 1990's. Congressional authorization for construction was granted in 2002. Ground breaking on the first phase of the project occurred in 2006.

2007 promises to be another busy year for the St. Mary Rehabilitation Project. We are actively working with all three offices of Montana's Congressional Delegation to develop legislation for the 110th Congress. Representatives from DNRC, the Blackfeet Tribe, and US Bureau of Reclamation will start planning activities aimed at addressing compliance with the National Environmental Policy Act in a cost effective and efficient manner. On the engineering front, TD&H will continue slope monitoring activities at the St. Mary and Hall Coulee siphon crossings, develop preliminary designs and technical specifications for stabilizing the slopes, process all the survey data collected in 2006, and refine engineer designs and cost estimates.

All activities planned for 2007 will add to the solid foundation of technical, economic, and environmental information we built up 2006. All Phase 1 and Phase 2 engineering reports are available in PDF format on the St. Mary Project web site **http://dnrc.mt.gov/st_mary/**

St. Mary Facilities Factoids:

☞ *The St. Mary Facilities are owned and operated by the U.S. Bureau of Reclamation.*

☞ *The St. Mary facilities are located entirely on the Blackfeet Reservation in Glacier County, diverting on average 150,000 acre-feet of water from the St. Mary River to the North Fork of the Milk River for use by municipalities, irrigation, and recreation in the Milk River Basin. It is the main source of water for the region.*

☞ *The St. Mary facilities include a diversion dam and headgate on the St. Mary River; 29 miles of canal; two sets of steel siphons; and five concrete drop structures, which have been in operation since 1916.*

☞ *After 89 years of service, many components of the diversion system have exceeded their design life and are in critical need of repair or replacement. Without imported water from the St. Mary diversion, the Milk River would run dry every six out of ten years on average.*

☞ *Currently about 121,000 acres of land in the Milk River Basin are irrigated with water imported from the St. Mary River.*

Heavy Activity on Milk River Basin Compacts

Jay Weiner, Staff Attorney, Reserved Water Rights Compact Commission

The Montana Reserved Water Rights Compact Commission ("RWRCC") remains hard at work trying to reach water rights settlements with the Blackfeet Tribe, and with the U.S. Fish and Wildlife Service ("FWS") for its Bowdoin National Wildlife Refuge, and to move the Ft. Belknap Compact to Washington, D.C. for congressional approval.

Pelicans nesting on an island at Bowdoin National Wildlife Refuge (Photo courtesy of USFWS)

RWRCC staff, Blackfeet Tribe lawyers, staff and water committee members, and representatives from the federal negotiating team have been conducting face-to-face meetings and conference calls on a bi-weekly basis for the past several months in an effort to hammer out viable settlement concepts for the various drainages on the Blackfeet Reservation. In addition, a formal negotiating session was held in Great Falls on December 20. We seem to be closest to an agreement on Birch Creek, at the southern end of the reservation, while talks on the St. Mary/Milk system have been slowed by the Tribe's desire to obtain feedback from the Bureau of Indian Affairs and the Bureau of Reclamation on its St. Mary's proposal before engaging directly with the RWRCC on these issues. This feedback has been slow in coming. The RWRCC is hopeful, though, that this issue will soon move to the forefront of our negotiations. The Parties' goal continues to be to have a compact ready to be introduced before the end of the 2007 legislative session, but neither side is willing to rush into an agreement simply in order to meet that timeline.

A pelican takes off of Lake Bowdoin (Photo courtesy of USFWS)

As for Bowdoin, the RWRCC and the FWS have been working on a settlement concept that will have the FWS subordinate its Bowdoin water rights to all other water users on Beaver Creek and Black Coulee. In turn, the FWS will be entitled to take whatever water is left in Beaver Creek after everyone else's rights are satisfied, to make use of flows from Black Coulee that drain naturally into Bowdoin, and to drill for deep groundwater from the Madison aquifer to augment the Refuge's water supply. In addition, because of the salinity issues Bowdoin faces, the settlement will go into effect only after FWS has agreed with the State to a Memorandum of Understanding ("MOU") that sets forth some conditions on its ability to exercise the water right proposed to be recognized in the settlement. The parties are still working out the technical specifications for these conditions, but in one form or another, they will relate to the salinity levels of the lakes on the Refuge and possibly also their elevations. The idea is that unless FWS is operating under what the State believes to be safe conditions (in terms of minimizing both the risks of salty discharges and blown salts), it won't be able to use its federal reserved water rights unless and until it fixes those dangerous conditions. A negotiating session was held in Malta on January 24, where the parties came close to reaching agreement on the draft compact. Another negotiating session to finalize the draft is scheduled for February 6 at the Great Northern Hotel in Malta. Barring any unexpected developments, the parties then intend to take the draft compact out for public comment before seeking to introduce it (with whatever changes public comment indicates might be necessary) in the Montana legislature this session. RWRCC representatives are planning to hold open houses to discuss and answer questions about the draft compact in Malta at the Great Northern the evening of February 6th from 6-8pm, and then from 10am-4pm on February 7 at the upstairs meeting room of the First State Bank building.

Blowing salts of Dry Lake at Bowdoin National Wildlife Refuge (Photo by Mike Dailey)

On the Ft. Belknap front, representatives from the Tribes and the RWRCC are planning to travel to Washington, D.C. in the near future for meetings with the Montana congressional delegation and others about possible federal legislation to ratify the Ft. Belknap water rights compact. The Tribes and the RWRCC have been working on a draft federal settlement bill for over a year, and have now forwarded our joint draft to the congressional delegation as a basis for discussion. The draft bill includes provisions for the ratification of the compact; federal contributions to the Tribes and also to the mitigation of the impacts of the compact on off-reservation water users; the level of state contribution to mitigation; a land exchange program; an allocation of water to the Ft. Belknap Tribes out of Tiber Reservoir; and various other elements. As many readers will recall from the St. Mary rehabilitation process last year, a bill draft may emerge from Washington looking very different from what was sent. This Ft. Belknap legislation remains very much a work in progress, but we are hopeful that we will be able to have the settlement approved this year. Please contact Jay Weiner at the RWRCC if you have questions about the draft bill.

For more information visit the DNRC website at:

http://dnrc.mt.gov/

Or call: (406) 444-6841

Factoids continued...

☞ *The financial burden for operation and maintenance of the system lie with current contract holders, primarily irrigators, as required under the 1902 Reclamation Act. The Working Group is currently working with Montana's Congressional Delegation and Reclamation to find a legislative solution to the problem.*

☞ *St. Mary water accounts for about 50% of the annual flow in the Milk River, 70% of the flow during an average irrigation season, and up to 95% of irrigation season flow during severe drought years.*

☞ *An estimated $15 million is generated annually in recreation benefits.*

☞ *St. Mary water accounts for about $17 million each year in increased alfalfa production alone, which in turn supports many livestock operations in the region.*

☞ *About 17,000 people from Hingham to Nashua rely on the Milk River directly for drinking water or from recharged aquifers.*

☞ *Failure of the system would be devastating to communities, agriculture, and recreational economic development along the Hi-Line of Montana and the repercussions felt across the state.*

☞ *The estimated total costs for rehabilitation of the St. Mary facilities could be over $135 million.*

DNRC Hires New Water Resources Division Administrator

Helena, Mont. – The Montana Department of Natural Resources & Conservation (DNRC) Director, Mary Sexton, announced that John Tubbs has accepted the position of Administrator for the Water Resources Division of DNRC.

Prior to accepting the position, Tubbs was the Chief of the Resource Development Bureau within DNRC. He was directly responsible for the administration of the grant and loan programs including the Renewable Resource Grant and Loan, Reclamation and Development Grants, Irrigation Development, State Revolving Fund, and Regional Water System programs.

"Throughout his 22 year career in state government, John has worked closely with local governments, such as conservation districts, counties and municipalities, state agencies and the Legislature, tribal governments, federal agencies, and congressional staff. We're pleased to have him be in a key leadership role for water issues in Montana," Sexton explained.

Before managing financial assistance programs for the department, John was an economist in the Energy and Water Resources divisions. John received a M.A. in Economics and a B.S. in Forestry, both from the University of Montana, Missoula.

"I'm both excited and pleased to get the opportunity to be a part of the team of professionals working on the important water issues in Montana," Tubbs stated regarding his position. "I look forward to working with all Montanan's on the many important water issues we face in the state."

Tubbs began in the position November 20th. His office will be in the DNRC Water Resources Office at 1424 9th Ave in Helena.

John is married to Stephanie Ambrose and they have two sons.

Factoids continued...

☞ *Montana's Senior Senator Max Baucus secured $8 million in the Transportation Bill to replace the St. Mary Bridge and address environmental issues on the Blackfeet Reservation and cosponsored S. 3563 in the 109th congress.*

☞ *Senator Conrad Burns secured $500,000 to assist in moving the required and unfinished feasibility studies forward and introduced S. 3563 in the 109th congress.*

☞ *Congressman Denny Rehberg was able to secure language in the House of Representative for support of the project and introduce HR. 5705.*

☞ *The SMRWG working with the National Water Resources Association and the Family Farm Alliance has managed to bring this project to the forefront of national issues and water projects across the west. It is currently hailed as the "poster child" of aging infrastructure in the west.*

Lake Sherburne Dam and Tower

Milk River Water Supply

Jeremy Giovando, Bureau of Reclamation
January 4, 2007

The total storage for the Milk River Project is currently above average for this time of year. Storage for Lake Sherburne and Fresno Reservoirs are above normal and more specifically the content in Lake Sherburne is over twice the long-term average. The exception for the project is Nelson Reservoirs, which is below normal for this time of year. Releases from Lake Sherburne, as well as the St. Mary Canal diversions, were discontinued on the September 23, 2006. Fresno Reservoir releases were decreased on September 28 to winter levels of between 35-40 cfs. Water diversions from the Milk River to Nelson Reservoir were discontinued on October 14.

September through December streamflow conditions improved in the St. Mary Basin due to good fall precipitation. The precipitation that occurred in early November significantly increased streamflows and contributed to the highest recorded November inflow to Lake Sherburne. The SNOTEL site at Flattop Mountain recorded over 20 inches of total precipitation from the November event. Inflows from September through December for Fresno Reservoir were approximately 94 percent of average.

The snowpack entering 2007 is below normal in several basins across Montana. The snowpack in the headwaters and mainstem of the Missouri River are 82 and 98 percent of average, respectively. Areas further north along the Rocky Mountain Front reflect similar snowpack conditions. The Sun, Marias and Teton River basins' composite snowpack is approximately 99 percent of average. The early January snowpack for the St. Mary and Milk River basins are approximately 88 percent of average. At this time there is no clear indication that the drought conditions in these basins have improved.

Reclamation will continue to closely monitor snowpack and streamflow conditions prior to recommending allotments for the Milk River Project water users. Without significant precipitation during the next few months, conservative operations are anticipated for most of Reclamation's projects, including the Milk River basin.

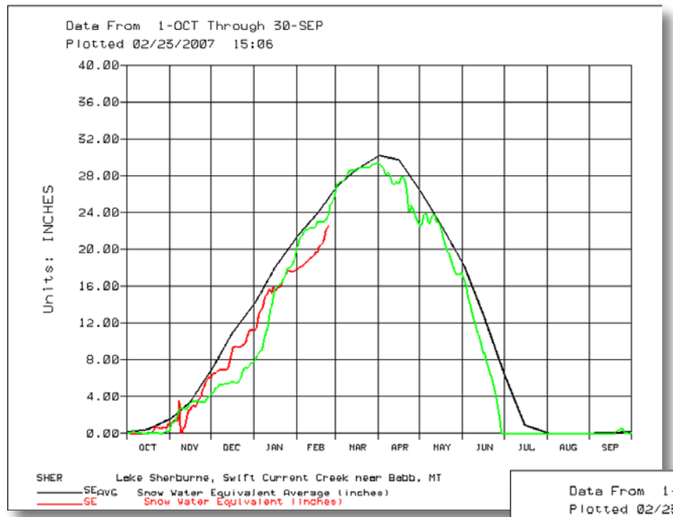
Storage as of February 26, 2007

Reservoir	Storage (acre-feet)	% Normal	% Full
Lake Sherburne	42,711	191	65
Fresno	40,259	113	43
Nelson (active)	26,154	82	43

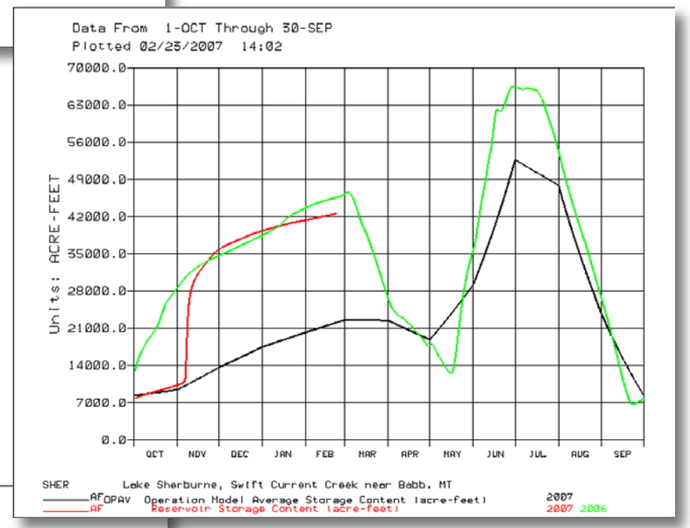
Representatives on the Milk River JBC:

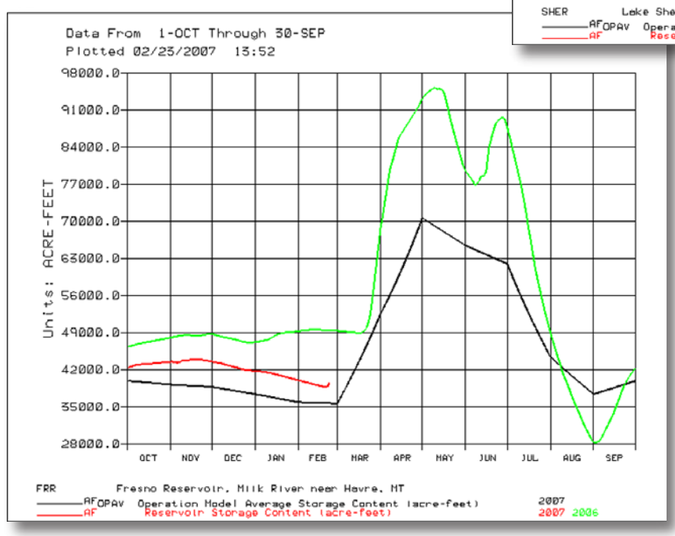
Kay Blatter	*Chairman*	*Fort Belknap Irr. Dist.*
Don Green	*Vice-Chairman*	*Malta Irr. Dist.*
Wade Jones	*Secretary*	*Malta Irr. Dist.*
Lee Cornwell	*Member*	*Glasgow Irr. Dist*
Wes Pankratz	*Member*	*Glasgow Irr. Dist.*
Ralph Snider	*Member*	*Harlem Irr. Dist.*
Brad Tilleman	*Member*	*Zurich Irr. Dist.*
Jeff Warburton	*Member*	*Paradise Valley Irr. Dist.*
Cole Maddox	*Member*	*Alfalfa Valley Irr. Dist.*
Joe Nicholson	*Member*	*Dodson Irr. Dist.*

Lake Sherburne Snowpack

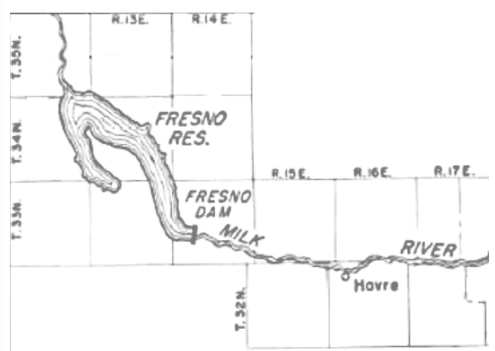


Lake Sherburne Storage





Fresno Reservoir Storage



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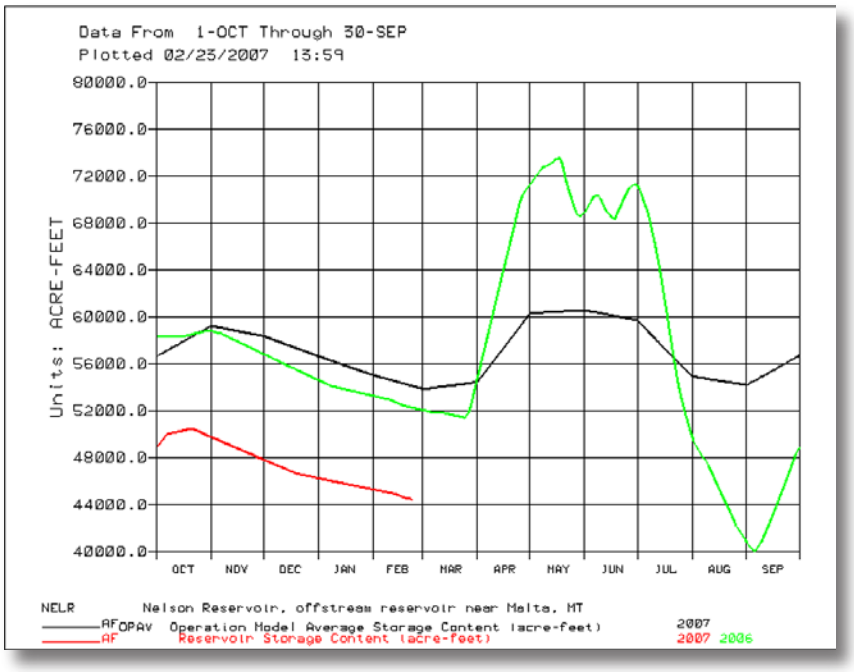
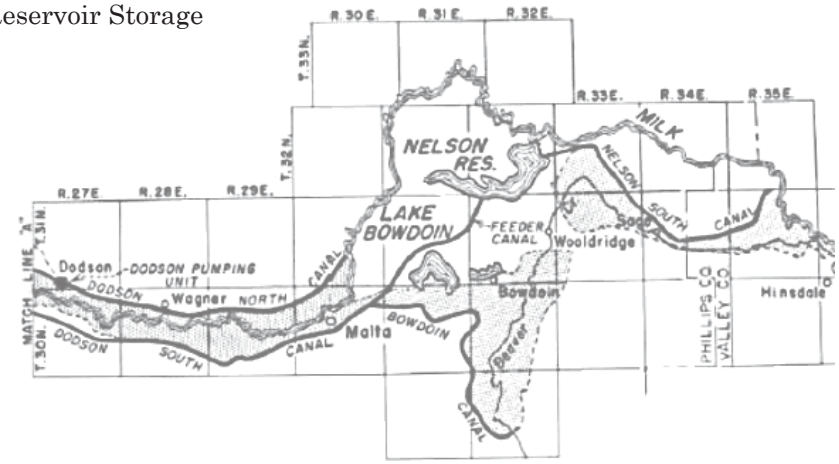


Nelson Reservoir Storage



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